

Amendments to the Claims

Claims 1-34 (Cancelled).

Claim 35 (Currently amended): A process for ~~separating the isomers HFC-227ea and HFC-227ea~~ purifying $\text{CF}_3\text{CFHCF}_3$ comprising: ~~providing~~ distilling a mixture ~~containing~~ comprising HFC-227ea $\text{CF}_3\text{CFHCF}_3$, HFC-227ea $\text{CF}_3\text{CF}_2\text{CF}_2\text{H}$, and at least one chlorofluorocarbon; ~~and separating by distillation the mixture to obtain essentially pure HFC-227ea isomer~~ to form a solution comprising $\text{CF}_3\text{CFHCF}_3$.

Claim 36 (Currently amended): The process of claim 35 wherein the at least one chlorofluorocarbon comprises C_3ClF_7 .

Claim 37 (Currently amended): The process of claim 35 wherein the mixture comprises a mole ratio of the chlorofluorocarbon to HFC-227ea ratio is the $\text{CF}_3\text{CFHCF}_3$ of from about 0.1 to about 10.

Claim 38 (Currently amended): The process of claim 37 wherein the mixture comprises a mole ratio of the chlorofluorocarbon to HFC-227ea ratio is the $\text{CF}_3\text{CFHCF}_3$ of at least about 1:2.

Claims 39-71 (Cancelled).

Claim 72 (Currently amended): A process of ~~separating C-3~~ for purifying chlorofluorinated compounds ~~from a halogenation reaction product~~ comprising:

providing a ~~halogenation~~ reaction product comprising HCl, HF, and a C-3 chlorofluorinated compounds compound, ~~HCl and HF~~;

~~adjusting the temperature of the halogenation reaction product to a sufficient temperature to separate~~ phase separating the reaction product into at least three phases, including an upper phases; a gas phase containing comprising the HCl, a top liquid phase containing comprising the HF, and a bottom liquid phase ~~containing essentially acid-free~~ comprising the C-3 chlorofluorinated compounds compound; and

removing the bottom liquid phase to ~~obtain essentially pure~~ form a solution comprising the C-3 chlorofluorinated compounds compound.

Claim 73 (Currently amended): The process of claim 72 wherein the C-3 chlorofluorinated compounds ~~comprise~~ compound comprises CFC-217ba C₃F₇Cl.

Claim 74 (Currently amended): The process of claim 72 wherein the phase separating comprises altering the reaction product temperature to a temperature is of from about 20°C to about 75°C.

Claim 75 (Original): The process of claim 74 wherein the temperature is about 25°C.

Claims 76-88 (Cancelled).